

WO 2005/009051 A1

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
27 January 2005 (27.01.2005)

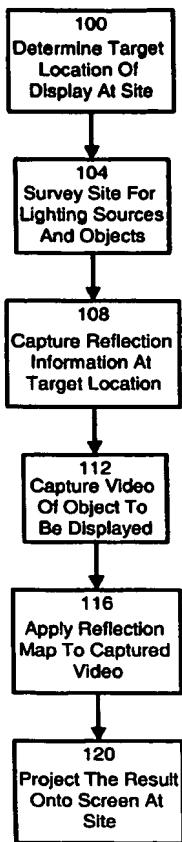
PCT

(10) International Publication Number
WO 2005/009051 A1

- (51) International Patent Classification?: **H04N 13/00**
 [CA/CA]; 4092 Bridgewater, Niagara Falls, Ontario L2G 6H7 (CA).
- (21) International Application Number:
PCT/CA2004/001026
- (22) International Filing Date: **15 July 2004 (15.07.2004)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
 60/487,267 16 July 2003 (16.07.2003) US
 2,449,982 18 November 2003 (18.11.2003) CA
- (71) Applicant (for all designated States except US): **AURORA DIGITAL ADVERTISING INC. [CA/CA]**; 939 Niagara Parkway, Fort Erie, Ontario L2A 5M4 (CA).
- (72) Inventor; and
 (75) Inventor/Applicant (for US only): **MARION, Dale Scott**
- (74) Agent: **SCHLOSSER, Dale**; BCE Place, Suite 2500, 181 Bay Street, Toronto, Ontario M5J 2T7 (CA).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: THREE DIMENSIONAL DISPLAY METHOD, SYSTEM AND APPARATUS



(57) Abstract: A system, method and apparatus for providing a two dimensional image that will be perceived by the human visual perception system as a three dimensional image is disclosed. The system and apparatus preferably employ a transparent rear projection screen onto which an image of the at least one object to be displayed is projected. The at least one object moves at perceptual speed and preferably has highlights, comprising specular highlights, ambient lighting, shadows and reflections, consistent with its display location so that the human visual perception system perceives the displayed image as a three dimensional one. The method preferably comprises surveying the display site to identify important light sources and objects and to gather a reflection map which are both used to create the final displayed image.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SB, SI, SK, TR), OAPI (BJ, BJ, CH, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *with international search report*